



How to Calculate the ROI from Mobile Construction Apps: 5 Steps to Tangible Benefits

Save labor costs and time while eliminating costly rework.

Contents

3 Introduction

4 Step 1: Establish Benchmarks

Objective Benchmarks

Subjective Benchmarks

5 Step 2: Determine Total Implementation Costs

Determine Your Direct Costs

Determine Your Indirect Costs

6 Step 3: Determine Benefits

8 Step 4: Translate Construction App Benefits into Real Dollars

9 Step 5: Calculate the Return on Investment

Translating Cost Savings into ROI

10 Conclusion



Introduction

If you're an innovative construction company thinking of purchasing a mobile construction app, you'll want to seriously consider what kind of return on investment you'll get from your purchase. Many construction companies are reluctant to adopt mobile construction apps because typical software they've purchased in the past hasn't provided the kind of return on investment they were looking for.

However, unlike traditional construction software, the ROI from mobile construction apps can be quite substantial depending upon what apps you purchase and what goals your company has. By adopting mobile construction apps, you can achieve substantial benefits by saving time, improving collaboration and planning, automating administrative tasks and mitigating risks to increase your profit margins. All of these benefits translate directly into tangible ROI, such as dramatic savings in labor costs, time and rework that will positively affect your bottom line.

While each project is unique and each team has its own specific challenges and pain points, we've provided a 5-step process to help you calculate the return on your investment in mobile construction technology:

- Step 1:** Establish benchmarks
- Step 2:** Determine total implementation costs
- Step 3:** Determine benefits
- Step 4:** Translate those benefits into dollars
- Step 5:** And calculate your ROI



Step 1: Establish Benchmarks

To get started calculating the return on your investment in mobile technology, you need to know what success looks like. Generally you need to ask some basic questions that fall into two categories: objective and subjective.

Quantifiable, Objective Benchmarks

Are you interested in improving productivity throughout your organization or are you simply interested in reducing error and increasing quality? Maybe you'd like to achieve both? Perhaps you want to be more profitable. Whatever your goals are, make sure you include ones that are clearly measurable so that you can accurately calculate success and return on investment.

Qualitative, Subjective Benchmarks

Most construction firms include objective benchmarks, but fail to include subjective ones. For example, although "happiness" is difficult to measure, it's certainly critical to keep skilled labor and good employees, and intangible benefits like happy workers can help your company to be more productive over the long term. What's more, you can transform this subjective benchmark into an objective benchmark simply by doing a baseline survey pre- and post-implementation on your employees' relative happiness. Whatever those intangible benefits are, make sure you take the time to sit down and think about what these things are worth to you, even if you can easily translate them into savings or other benefits.



Step 2: Determine Total Implementation Costs

After you've established your benchmarks by asking the right questions, the next step is to determine your total implementation costs by tracking and analyzing both your direct costs as well as your indirect costs.

Determine Your Direct Costs

By direct costs, we're referring to the direct costs of construction mobility and any related infrastructure. These costs include a single purchase which can be reused, avoidable costs due to trial and error and recurring purchases costs per project. These three costs make up your total market costs.

Determine Your Indirect Costs

Indirect costs aren't just initial setup costs. They're also weekly implementation costs or time you'll spend per week on training or other tasks to use the app, such as uploading files. It's important to factor in indirect costs so you can accurately evaluate the return on your investment. If you only factor in direct costs, but spent 48 hours setting up the software and then many hours every week implementing the technology, that's labor you're spending and you need to account for it.

Single purchase + avoidable costs + recurring purchases costs = total market costs

SINGLE PURCHASE (can be reused)	AVOIDABLE COST (trial and error)	RECURRING PURCHASE (per project)	TOTAL MARKET COST (retail)
\$ 57,487.54	\$ 2,270.00	\$ 30,720.00	\$ 90,477.54



Step 3: Determine Benefits

Now that you've figured out your total costs, both direct and indirect, you're in a much better position to determine your benefits. However, similar to establishing costs, you'll need to think through a series of questions to best determine your benefits.

Beyond understanding how you're using tools, you'll need to really see what changed from before and what value the tool adds to the project and/or the owner. Finally you'll ask this key question: "How do we translate value into dollars?"

While there are many benefits to using mobile construction apps, there are three primary criteria for determining ROI from mobile. Below we've broken down cost savings by three major categories: reduced personnel (labor costs), schedule acceleration and reduced rework.



Key Questions to Ask to Evaluate ROI

- How are we using the tools?
- What's changed from before?
- What value does the tool add to the project/owner?
- How do we translate value into dollars?

Reduced Personnel/Labor	Schedule Acceleration	Reduced Rework
By increasing efficiency, teams can spend saved time on value-adding activities, essentially enabling teams to reduce personnel. For example, if the team as a whole has 20% more time available for value-added activities, the team could be reduced from 5 to 4 and still achieve the same output as 5 workers.	One way to spend time savings is to focus on improving schedule, rather than reducing man hours or personnel. In the same scenario, teams could opt instead to invest the 20% of overall time savings into thousands of hours of value-added activities designed to optimize schedule.	Yet one other way to spend efficiency gains is to focus on quality rather than schedule. By spending 20% time savings on improving quality, the same company in this scenario could potentially eliminate or drastically reduce costly rework. One study has suggested that with as little as 50 additional hours a week of field supervision and planning, as much as 1/3rd of rework could be prevented.
Save Labor Costs	Save Overrun Costs	Save Rework Costs



How to Calculate the ROI from Mobile Construction Apps: 5 Steps to Tangible Benefits

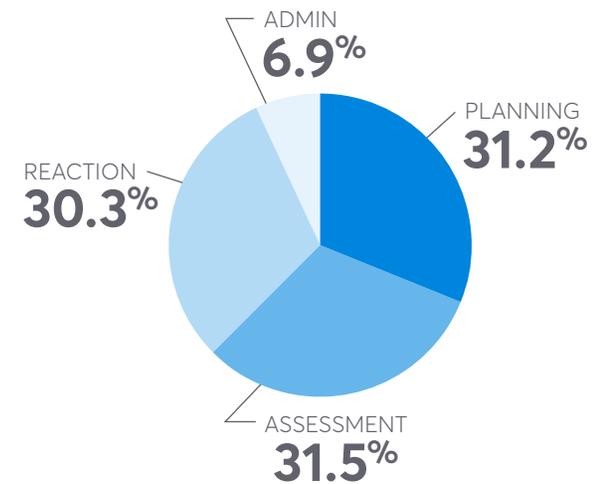
To see how this might work, let's examine a hypothetical project. To determine time savings benefit, we'll start by assessing how much time you might spend running and managing 25 tasks on a given project before you implemented mobile construction apps and then evaluate it against how much time you were spending after. To help us identify where efficiency gains are made, we'll categorize tasks into 4 categories: assessment, reaction, planning and administration.

If, for example, you 62 hrs/wk but it's now it's only costing you 54.5 hours to manage those 25 tasks due to productivity gains, you've returned 16.5 percent of time/ labor saving back into the project. This time could then be put back into value-added activities like planning to provide further benefits and ROI by accelerating schedule and reducing rework.

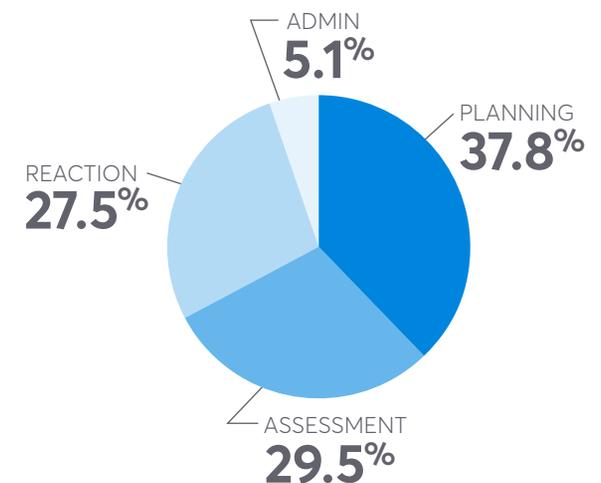
The chart to the right showcases a

key cost savings benefit: the time you saved on administration can then be put back into planning, which will add further benefits such as schedule acceleration and reduced rework.

Total Time Spent Managing Project After Mobile Apps



Total Time Spent Managing Project Before Mobile Apps



Step 4: Translate Construction App Benefits into Real Dollars

Okay, so now you know how much productivity improved or time you've saved. But what do those benefits actually mean? How do you translate the benefits from mobile construction apps into real dollars? While there is no standard way to calculate it, Michael Moran, a construction consultant at Telo has developed a really practical model that's easy to understand and use.

Moran's model can help you calculate:

- Cost savings from reduced site supervision personnel needs
- Cost savings through earlier delivery
- Cost savings through less rework

Average efficiency gains per user	Average days saved per month	Average % reduction in rework costs
X total users	X total time in use	X average cost of rework as % of direct costs
X total time in use	X average project overhead costs/day	X Total direct costs
X labor costs per user		
Personnel Costs Saved	Cost Savings Due to Accelerated Delivery	Cost Savings Due to Improved Quality



Step 5: Calculate the Return on Investment

Once you know how much cost you're saving from labor and rework reduction, it's time to translate those dollar amounts into an accurate ROI metric. That's right, it's finally time to translate savings from quality improvement, delivery acceleration and labor efficiency into return on investment.

We've included two practical formulas to help you make sense of the raw numbers:

Translating Cost Savings into ROI:

If a contractor decides to reduce personnel headcount, effectively achieving the same performance with less staffing requirements, she saves labor costs. In this case, the ROI calculation would look like this:

$$ROI = \frac{(\text{Personnel Cost Savings} - \text{Software and Hardware Costs})}{(\text{Software and Hardware Costs})} \times 100\%$$

However, if a contractor decides to accelerate schedule and improve quality by reinvesting in the same size team, the ROI calculation would look like this:

$$ROI = \frac{((\text{Quality Savings} + \text{Schedule Savings}) - \text{Software and Hardware Costs})}{(\text{Software and Hardware Costs})} \times 100\%$$

The key takeaway here is that ROI can be calculated differently depending on how a construction firm decides to translate cost savings resulting from productivity improvements. There is no "right" way to do it.



Conclusion

Despite a common misconception, the construction industry is embracing technology. In fact, mobile construction technology is no longer a fad and is actually revolutionizing the way we build.

Mobile apps are enabling a myriad of innovative construction companies to experience significant benefits that translate directly into substantial return on investment. By adopting construction mobile apps, you can achieve substantial benefits by saving time, improving collaboration and planning, automating administrative tasks and mitigating risks to increase your profit margins.

There's no better time than now to start adopting mobile technology into your workflows. Construction companies have already started to adopt mobile technology. Don't get left behind. By doing so, you'll see dramatic savings in labor costs, time and rework that will positively affect your bottom line.



See a Live Demo

or give us a call at +1 (415) 429-1227

PlanGrid construction productivity software is the easiest and most cost-effective way to get substantial return on your investment in construction mobile apps. By using PlanGrid you will:

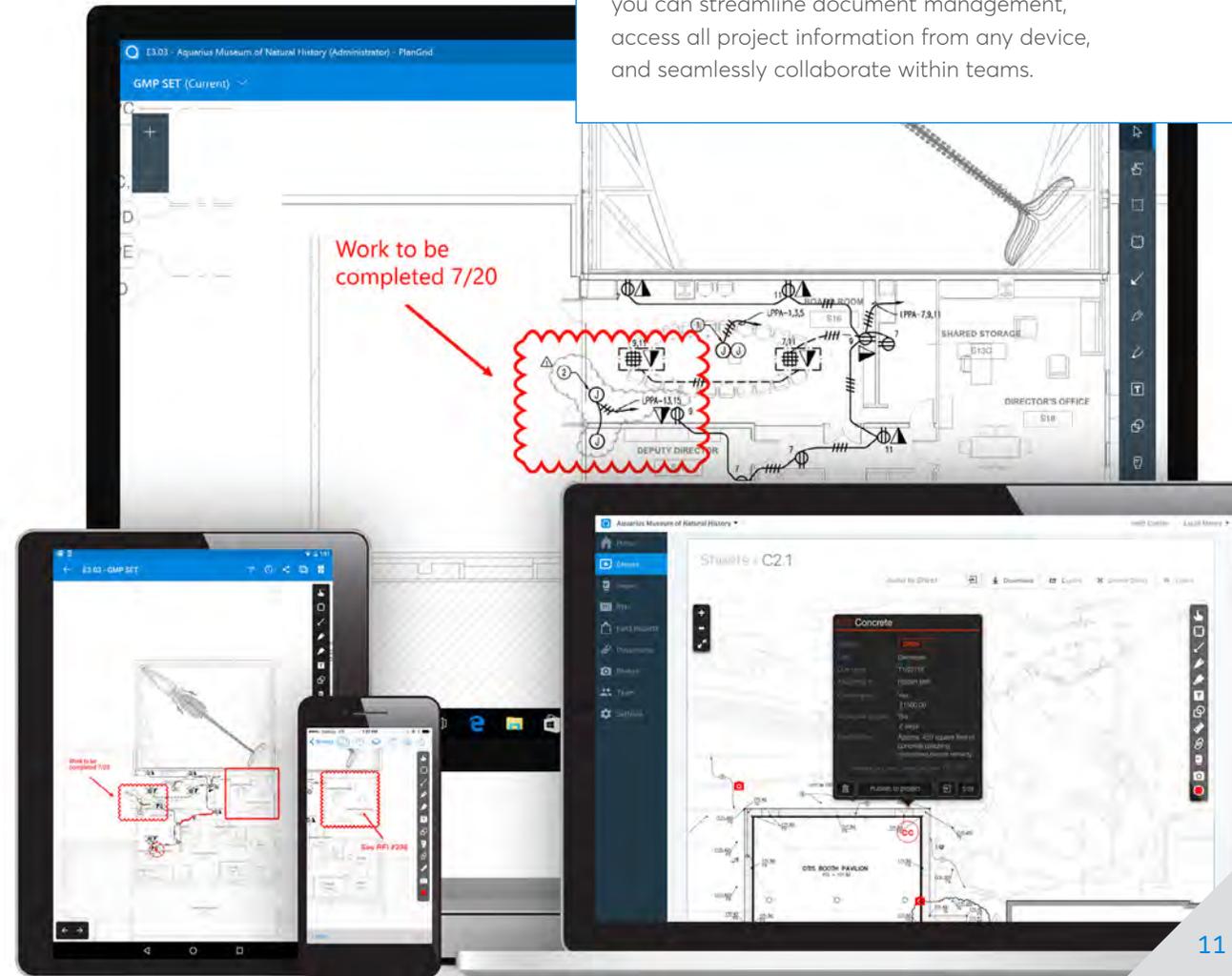
- **Complete projects faster:** 90% of project costs occur in the field not the office and most can be attributed to time waste or delays. With PlanGrid, you can reduce wasteful trips to the trailer and time delays while eliminating costly rework with faster collaboration and communication.
- **Reduce costs:** PlanGrid allows you to optimize productivity in the field, which eliminates time waste that causes project overruns. By completing projects early or on time with PlanGrid, contractors will benefit from reduced costs.
- **Win more bids:** The best way to bid more competitively is not just to track costs so you can provide more accurate estimates—it's to improve your overall productivity. PlanGrid's construction productivity software will allow you to increase productivity so you can reduce costs and win more bids.



Try PlanGrid for Free



There is a reason why PlanGrid is not only the #1 construction app, but also the highest rated. With PlanGrid construction productivity software, you can streamline document management, access all project information from any device, and seamlessly collaborate within teams.





Used on more than 500,000 projects around the world, PlanGrid is the first construction productivity software that allows contractors and owners in commercial, heavy civil, and other industries to collaborate, collect, and share project information from any desktop or mobile device through the entire project lifecycle.

PlanGrid increases project efficiency by streamlining document management, providing construction teams with easy access to all project information from any device, and enabling seamless collaboration within teams.

Guide Author:

Lynn Langmade

Director of Content Marketing, PlanGrid
[@llangmade](#)

Connect with PlanGrid



© 2017 PlanGrid, Inc. All Rights Reserved.

United States
+1 (415) 963-4088
www.plangrid.com

Australia
AUS 1800 316 406
www.plangrid.com/au

United Kingdom
+44 (0) 20 3695 0292
www.plangrid.com/gb

Canada
(800) 646-0796
www.plangrid.com/ca-en
www.plangrid.com/ca-fr